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EXAMINER

JULES, FRANTZ F

ART UNIT

PAPER NUMBER

3617

DATE MAILED: 11/21/2001

*Handwritten signature/initials*

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/804,406

Applicant(s)

FORBES, JAMES W.

Examiner

Frantz F. Jules

Art Unit

3617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-61 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-12 is/are allowed.
- 6) ☒ Claim(s) 1-8, 13-22 and 25-61 is/are rejected.
- 7) ☒ Claim(s) 23 and 24 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 20, 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 20, lines 1-2, the phrase "said upper flange of said first end portion of said center sill is mounted more than 42 inches above top of rail" is confusing as it is unclear what particular structure defining the top of rail, applicant is referring to. Similar confusing term exists in claim 28.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-8, 14-18, 21-22, 25-28, 30-34, 56-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dominguez et al in view of Landregan et al. Claims 1-8, 14-18, 21-22, 25-28, 30-34, 56-60 Dominguez et al teach all the limitations of claims 1-8, 14-18, 21-22, 25-28, 30-34, 56-60 except for a center beam railroad car having a center sill member with a portion of its upper flange corresponding to the height of the end decking portions with a medial

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portion of the deck structure being stepped downward by a distance of at least 30 inches. The general concept of using a center sill member with a portion of its upper flange corresponding to the height of the end decking portions is well known in the art as illustrated by Landregan et al, see figs. 1-6, abstract section. Using a medial portion depth of the deck structure being stepped downward by a distance of at least 30 inches is obvious design expediency. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Dominguez et al to include the use of a center sill member with a portion of its upper flange corresponding to the height of the end decking portions with a medial portion of the deck structure being stepped downward by a distance of at least 30 inches in his advantageous center beam railroad car as taught by Landregan et al in order to reduce deflection in the center sill member or the floor assembly while allowing the railroad car to carry more load.

5. Claims 41-44, 47-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dominguez et al in view of Landregan et al as applied to claims 1-8, 14-18, 21-22, 25-28, 30-34, 56-60, and further in view of Fehrenbach et al.

Claims 41-44, 47-51

Dominguez et al and Landregan et al teach all the limitations of claims 41-44, 47-51 except for a center beam railcar having welding aperture in a center sill member. The general concept of adding welding aperture to a structure is well known in the art as illustrated by Fehrenbach et al, see figs. 3-5. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Dominguez et al to include

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the use of welding aperture to the center sill member of his advantageous center beam member in order to reduce manufacturing cost of the railcar.

6. Claims 35-40, 45-46, 52-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dominguez et al in view of Landregan et al.

Claims 35-40, 45-46, 52-55

Regarding using ratio of height to width of center sill member greater than 2 to 1 as recited in claims 35-40, 45-46, 52-55, It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Dominguez et al to include the use of various height to width ratio of the center sill member in his advantageous system, as center sill design is a common and everyday occurrence throughout the center beam rail car design art and the specific use of ratio of height to width greater than 2 to 1 would have been an obvious matter of design preference depending upon such factors as the weight of the object to be carried by the center beam railcar, the yield strength of the center sill material; the ordinarily skilled artisan choosing the best stress profile corresponding to a particular loading imposed on the side walls which would most optimize the cost and performance of the device for a particular application at hand, based upon the above noted common design criteria.

7. Claims 13, 19, 29, 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dominguez et al in view of Landregan et al as applied to claims 1-8, 14-18, 21-22, 25-28, 30-34, 56-60, and further in view of Jamrozy et al.

Claims 13, 19, 29, 61

Dominguez et al teach all the limitations of claims 13, 19, 29, 61 except for a center

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beam Railcar having end side sill members with greater depth than medial side sill members. The general concept of using end side sill members with greater depth than medial side sill members in a rail road car is well known in the art as illustrated by Jamrozy et al. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Dominguez et al to include the use of end side sill members with greater depth than medial side sill members in his advantageous center beam rail road car as taught by Jamrozy et al in order to reduce stress concentration at the corner section of the side sill member thereby reducing the risk of failure in the rail car.

***Allowable Subject Matter***

8. Claims 23-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Claims 9-12 stand allowable.

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Klag is cited to show a related rail road car having a drop center structure with a hollow box center sill member including cap plate.

O'Neill et al are cited to show a related rail car having center sill member with wider section at the end than at the center.

Forbes is cited to show a related rail car having ladder rung in side sill members.

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Miller et al are cited to show a related rail car having center sill members with a cap plate.

Saxton is cited to show a related rail road car having box or tubular members in the upper assembly.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frantz F. Jules whose telephone number is (703) 308-8780. The examiner can normally be reached on Monday-Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph S. Morano can be reached on (703) 308-0230. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Frantz F. Jules  
Examiner  
Art Unit 3617

FFJ

November 16, 2001

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A handwritten signature in black ink, consisting of a stylized 'S' followed by a long horizontal stroke that extends to the right.

S. JOSEPH MORANO  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600